




PURCHASING AUTHORITY
Town of New Milford, Connecticut
Solar Energy System Design and Installation RFP

The Town of New Milford, Connecticut is soliciting proposals from a qualified bidder to design, fabricate, deliver, install, operate, and maintain a rooftop solar photovoltaic electric generating system under a Power Purchase Agreement (PPA). The successful bidder must demonstrate the ability to perform the work described in the Scope of Services set forth in this solicitation and have significant experience successfully performing comparable work.

The Town reserves the right to reject any and all submissions.

All bidders must submit by December 22, 2016, 3:00 p.m. to the Town of New Milford Purchasing Department, Town of New Milford, 10 Main Street, New Milford, CT 06776. Mark the outside of the sealed envelope "RFP for Solar Design/Installation. Submissions received after that time will be considered informal and rejected.

The proposal package may be obtained online at www.newmilford.org, at the Office of the Director of Finance or by contacting vdouglass@newmilford.org.


David Gronbach, Mayor



PURCHASING AUTHORITY
Town of New Milford, Connecticut

Request for Proposal
Solar Energy System Design and Installation Purchase Agreement

Solicitation

The Town of New Milford, Connecticut is soliciting proposals from a qualified Contractor/Vendor to design, fabricate, deliver, install, operate, and maintain a rooftop solar photovoltaic electric generating system under a Power Purchase Agreement (PPA).

Contractor/Vendor must demonstrate the ability to perform the work described in the Scope of Services set forth in this solicitation and have significant experience successfully performing comparable work.

Scope of Services for this Solicitation

1.1 Objective

The objective of this Request for Proposal (RFP) is to identify and select the most qualified turnkey photovoltaic (PV) system Contractor/Vendor for the design, fabrication, delivery, installation, operation, maintenance, and ownership of one PV system initially and potentially five (5) other town properties/schools within the Town of New Milford. Contractor/Vendor should prepare system summary detailing each location and applicable equipment/size, and a sample cash flow analysis detailing expected savings (both kWh and dollar) and potential buyout implications to long-term savings. Upon selection of the most qualified Contractor/Vendor, The Town of New Milford intends to enter into a PPA for a term negotiated between New Milford and Contractor/Vendor.

The awarded Contractor/Vendor shall apply for and manage the rebate funding under CL&P and Renewable Energy Credit (REC) paperwork.

1.2 General

The scope of services provided by the Contractor/Vendor shall include all tasks required to design, fabricate, deliver, install, operate, and maintain the PV system for Town of New Milford. The scope shall also include, but not be limited to, securing all permits and approvals from governing agencies, all labor, taxes, services, permit fees, and equipment necessary to produce a fully operational solar PV system.

The proposal shall contain a detailed explanation of the complete project and delineation of all work tasks to be performed by the awarded Contractor/Vendor.

1.3 Description

The proposal is for several Photovoltaic systems to be located on town property/school(s) owned by the Town of New Milford, with emphasis on the former John Pettibone School located on Pickett District Road. See attachment A for a list of buildings. Proposer is to determine feasibility and costs for a variety of sites from the list, sites deemed to unfeasible by proposer may be eliminated from consideration by the proposer.

1.4 Design, Engineering, & Permitting

Design/engineer the solar PV system to maximize the solar energy resources, taking into consideration the customer's electrical demand and load patterns, proposed installation site, available solar resources, existing site conditions, proposed future site improvements, and other relevant factors.

Provide design documents that provide the following minimum information:

- Timeline/Project Schedule
- System description
- Equipment details and description
- Layout of installation
- Layout of equipment
- Selection of key equipment
- Specifications for equipment procurement and installation
- All engineering associated with structural and mounting details
- Performance of equipment components, and subsystems
- Integration of solar PV system with other power sources
- Electrical grid interconnection requirements
- Controls, monitors, and instrumentation
- System performance monitoring

Identify an appropriate location for the solar PV inverter equipment and its related components and environmental control systems that will meet the following criteria:

- Ease of maintenance and monitoring
- Efficient operation
- Low operating losses
- Secured location and hardware
- Compatibility with existing facilities
- Avoidance of flood-prone areas
- Visual harmony

Awarded Contractor/Vendor will secure from governing agencies and the utility company all required rights, permits, approvals, and interconnection agreements at no additional cost to Town of New Milford. The Town of New Milford will become the signatory on

applications, permits, and utility agreements only where necessary. The awarded Contractor/Vendor will complete and submit in a timely manner all documentation required to qualify for available rebates and incentives.

1.5 Installation

Supply all equipment, materials, and labor necessary to install the solar PV systems and integrate them with other power sources.

1.6 Electrical Interconnections

Supply and install all equipment required to interconnect the solar PV systems to CL&P distribution system. The awarded Contractor/Vendor will fulfill all application, studies, and testing procedures to complete the interconnection process. All costs associated with utility interconnection shall be borne by the awarded Contractor/Vendor.

1.7 Commissioning & Acceptance Testing

During the start-up, the Town of New Milford, and/or its independent engineer/consultant, shall observe and verify each system performance. Required commissioning and acceptance test services include:

- Starting up the solar PV systems until it achieves the performance requirements
- Conducting the performance testing over a consecutive twenty-four (24) hour period
- Conducting the successful delivery of power within thirty (30) days following completion of the system, meeting each benchmark.

1.8 Operation and Maintenance Manuals and As-Built Drawings

Provide three (3) sets of operation, maintenance, and parts manuals for the solar PV system. The manual shall cover all components, options, and accessories supplied. It shall include maintenance, trouble-shooting, and safety precautions specific to the supplied equipment. It shall also delineate responsibilities of both parties, both during the term of any agreement and after any potential buyout that may be agreed to.

Provide three (3) sets of as-built drawings including one (1) on CAD. These requirements shall be delivered prior to acceptance of the solar PV system.

1.9 Monitoring

Monitoring of system performance and providing public education and outreach is a required element of the RFP.

Provide the equipment and services to tie into the Garfield Energy Navigator to allow the Town of New Milford to monitor, analyze, and display historical and live solar electricity

generation data. The regularly collected data should reflect, but not be limited to, the following:

- System performance
- System availability
- Average and accumulated output
- Capacity factor
- Degradation
- Cost avoidance

The data acquisition system shall be designed for turnkey, remote operation. Data shall be transmitted via Internet or telephone from the site to a server managed by Garfield Clean Energy. Data format shall be coordinated with requirements of the county wide data acquisition system utilizing the Garfield Energy Navigator. The data acquisition system must not require a dedicated or always-on personal computer.

Provide a long term cost for electricity (kWh) for the term of the awarded contract and any assumptions used in these calculations.

1.10 Warranties and Guarantees

Identify the warranties to be transferred to the Town of New Milford, if the Town purchases the PV system.

1.11 Operation and Maintenance

Provide a financial impact or price for operating and maintaining the PV system on the Town of New Milford's behalf for a twenty (20) year service term.

Perform all required maintenance activities, including warranty repair work and equipment replacement including, but not limited to, inverter replacement in order to keep the system operational and performing to production guarantees.

1.12 PV System Removal

The awarded Contractor/Vendor shall bear the sole responsibility of removing the PV system at the end of the twenty (20) year service term should the Town of New Milford at its sole discretion opt not to purchase the PV system.

1.13 Special Provisions

Special provisions will be based on the specific Town owned facility.

2.0 Project Requirements

2.1 Licensing/Certification

Contractor/Vendor must be properly licensed in the State of Connecticut. The Contractor license shall appear clearly on Contractor/Vendor's proposal and the license expiration date appear on the Contractor/Vendor's Proposal. Contractor/Vendor shall provide proof that NABCEP certified installers shall be performing the installation.

2.2 Operation & Maintenance Requirements

All respondents must offer a comprehensive onsite operation and maintenance service program for the PV system operations, safety and maintenance activities.

The Contractor's operation and maintenance service program should provide the following minimum requirements:

Annual on-site system inspection, including:

- System testing (operating current of each electrical string)
- Routine preventive maintenance
- Repair and/or replacement of defective parts (including equipment and labor)
- System performance monitoring and historical data access for customer via secure website. Data should include:
 - System energy and power production
 - Ambient temperature
 - Wind speed
 - Insolation

Daily system monitoring by vendor, including:

- Reporting of problems to customer
- Dispatch of resources for expeditious resolution of problems

3.0 Contractor Qualification

Please provide the following information:

- Status (private/publicly-held)
- Number of employees
- States in which you do business
- Target customers (residential, commercial, industrial, government, etc.)
- Project team profile, including:
 - Resumes of personnel to be directly involved with the development of the proposed systems.

- Team leader identification for the entire Proposal, including full contact information.
- Identification of each entity, sub-contractor, person or firm involved in the Proposal and their role/responsibility, e.g. design, installation, permitting, equipment supply by component, operations and maintenance.
- Identification of the lead person responsible for each of the entities or firms described in above.

3.1 Contractor Experience

- Provide overview of the firm(s) commercial grid-connected PV experience (do not include residential PV experience)
- Breakdown by application (roof mounted, vs. ground mounted) installed by your company.
- Average commercial grid-connected PV system size installed by your company during the last five years.
- Total commercial megawatt peak (MWp) of grid-connected PV systems installed under a Power Purchase Agreement.
- Experience with CL&P's and Solar Rewards Program.
- Experience with local government projects.

3.2 Contractor References

- List five (5) or more commercial grid-connected PV projects installed in the United States over the last five years. Include for each project:
 - Exact role(s) your organization performed for the project (e.g. material supplier, lead contractor, electrical subcontractor, design, consulting, etc.).
 - Location.
 - Application description.
 - Product name/type.
 - Customer name and contact information.
 - Date installed.
 - Project cost.
 - PV module used.
 - KWp rating.
 - Cumulative kWh produced since system installation.
 - Current operational status of system.
- Provide actual system data for five (5) of the grid-connected projects that demonstrates 90% or better availability of the PV projects used as customer references.
- Proposals shall demonstrate a proven, robust data acquisition system that includes tracking of site-specific actual kWh production and actual meteorological data including tracking of solar irradiance, ambient temperature, and module temperature, with data available remotely.

- Proposals shall provide evidence that the proposed technology and equipment would meet or exceed all currently applicable and proposed safety and interconnection standards. All equipment components must be UL certified, and meet existing facility structural and fire safety requirements.
- Proposals shall provide evidence that the proposed technology and equipment would meet or exceed all currently applicable and proposed environmental standards.

Pricing

Provide pricing for a turnkey (design/build) PV systems located within the Town of New Milford. Pricing should include: \$/kWh for twenty (20) years with and without an annual escalator.

Schedule

The Contractor/Vendor shall provide a proposed schedule for completion of the project.

Incurring Cost

The Town is not liable for any cost incurred by entities prior to executing a contract or purchase order.

Selection Process

Proposals will be evaluated by the Town based on:

- The competence to perform the services as reflected by past experience in providing the services outlined herein.
- The ability to meet the requirements of this RFP.
- Overall package and financial benefit to the Town.

The Town reserves the right to select or short-list any Contractor/Vendor that, in its opinion and at its sole discretion, is deemed to be most advantageous and in the best interests of the Town and its residents, including granting a preference to local contractors. The Town also reserves the right to delay or discontinue this selection process at any time during the process. The Town shall not be liable for any cost incurred by any Contractor/Vendor during the selection process. The Town also reserves the right to reject the selected Contractor/Vendor and contract with another party if the Town and the selected Contractor/Vendor cannot successfully negotiate a contract for the proposed work (or the terms of any related solar host agreement(s), site lease(s) or PPA(s)).

Proposal Deadline

Three (3) copies of Proposal for the Solar Energy System Design and Installation Purchase Agreement must be delivered to the New Milford Town Hall, 10 Main Street,

New Milford, CT 06776 by December 22, 2016 at 3:00 p.m. in the Office of Purchasing Specialist.

Inquires

Inquiries can be directed to Daniel Stanton, Town Engineer, Town of New Milford, Public Works Department at (860) 355-6040 Ext. 3249 or email at dstanton@newmilford.org. Please contact Daniel Stanton to arrange a site visit of the facilities listed in **Attachment A**.

Attachment A

Initial Building

Projected Electricity Provided by Building from Panels

- John Pettibone Elementary

27%

Potential Buildings

- Hill & Plain Elementary
- Northville Elementary
- Schaghticoke Middle School
- Sarah Noble Intermediate School
- New Milford High School

40%

27%

18%

18%

9%